DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 82.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-018219
Date Inspected: 15-Nov-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Westmont Industries

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Santa Fe Springs, CA.

CWI Name:	Ruben Dominguez			**CWI Present:**	☑ Yes	☐ No		
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☐ Yes	☐ No	☑ N/A	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A	
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A	
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A	
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A	

Bridge No: 34-0006
Component: Travelers

Summary of Items Observed:

The Quality Assurance Inspector Sean Vance arrived on site at Westmont Industries (WMI) in Santa Fe Springs, CA, to randomly observe the in process welding, WMI Quality Control (QC) Inspectors in process and completed visual and nondestructive testing of the Travelers. Upon the arrival of the QA Inspector the following observations were made:

Traveler Test Rack

On this date, The QA Inspector observed production welders Mr. Jim Muetzel (WID # 3133) and Mr. Larry Swanson continuing to perform Gas Metal Arc welding (GMAW) and fitting activities on plate material, for the Traveler Test Rack. The QA Inspector observed that the activities were being performed on the top and bottom flange plate material Complete Joint Penetration (CJP) splices, for the Box Beam Assembly 1-A1.

On this date, the QA Inspector observed production welder Mr. Michael Ruiz (WID # 3151) continuing to perform Flux Core Arc welding (FCAW) welding activities on the vertical post to base support columns and connector plates, for the Traveler Test Rack. The QA Inspector observed that the assembly appeared to be identified as Column B1, Assembly 14-F7. Reference shop drawing WMI –TTR-7. The QA Inspector observed Mr. Ruiz performing the FCAW in various positions, throughout the shift and the weld joints appeared to be designated as fillet and flare groove welds, per the shop drawings.

SAS-EB Traveler

Fixed Stairs Section

On this date, the QA Inspector observed Westmont Industries (WMI) production welder, Mr. Jose Rodriguez

(WID # 3031), continuing to perform Flux Core Arc Welding (FCAW) activities on the previously fit Frame assemblies, identified as 10-A237, 11-B237, 3-A217, 4-A218, 5-A223 and 6-A224. The QA Inspector observed throughout the shift, that the FCAW was being performed in various positions, on the connector plate and Tube Steel (TS) material fillet and flare groove welds. Additionally, the QA Inspector observed a WMI helper performing grinding activities on the previously completed fillet and flare groove welds on the Fixed Stairs Section. The QA Inspector observed that the grinding was being performed on previously marked areas by SE QC Inspector Ruben Dominguez, during preliminary Visual Testing. The QA Inspector observed that the areas previously marked and which the grinding was being performed, included excessive weld spatter, reinforcement and weld termination areas, which appeared to be non complying to the requirements of AWS D1.1 2002.

See attached picture below.

Lower Truss Section

On this date, the QA Inspector observed WMI production welders Mr. Eutimo Lopez (WID # 3035) and Mr. Raymundo Anaya (WID # 3196) performing layout, fitting and tacking activities on the Elevating Platform, for the Lower Truss Section. The QA Inspector initially observed Mr. Anaya reference the shop drawings to layout and mark the previously cut to length channel material, identified as Stair Support, piece mark A270F, per the shop drawings. Once the layout was complete, the QA Inspector observed Mr. Anaya then place and fit the previously cut to length Stair Riser material in the vertical position, identified as piece marks C270F, per the shop drawings. After the Stair Riser material was fit-up, the QA Inspector observed Mr. Lopez performing Flux Core Arc Weld (FCAW) activities on the material. At the end of the shift, the QA Inspector observed that a total of four Stair Risers had been FCAW tack welded to the Stair Support.

E2/E3-EB Traveler

On this date, the QA Inspector observed WMI production welder Mr. Jun Jimenez (WID # 3059), performing Flux Core Arc Welding (FCAW) welding activities on Tube Steel (TS) material. The QA Inspector observed that the FCAW being performed by Mr. Jimenez appeared to be for the Frame Assembly identified as A332, per the shop drawings. The QA Inspector observed that the weld joints appeared to be designated as 6mm fillet and flush flare groove welds and that Mr. Jimenez was performing the FCAW in the flat (1G) and vertical (3F) positions, throughout the shift. After completion of the fillet and flare groove welds, the QA Inspector then utilized a bridge cam gauge to perform measurements on the completed welds and the welds appeared to be in compliance with the shop drawing requirements.

See attached picture below.

The QA Inspector randomly observed that Smith-Emery QC Inspector Ruben Dominguez was present, during the above mentioned welding and fitting activities and QC Inspector Dominguez explained that approved Welding Procedure Specifications (WPS's) were being utilized. During random observation, the QA Inspector observed that the applicable WPS's and copies of the shop drawings, were located near each work station, where the above mentioned welding and fitting activities were being performed. The QA Inspector randomly verified that the consumable material, utilized during the welding appeared to be in compliance with the applicable WPS and that the above mentioned welders were currently qualified for the applicable process and position of welding. The QA Inspector randomly observed QC Inspector Dominguez verifying the in-process welding parameters, including voltage, amperage, pre-heat and travel speed and the parameters appeared to be in compliance to the applicable

WPS.

Summary of Conversations:

On this date, WMI material receiving manager, Mr. Moses Sy requested that the QA Inspector perform an inspection on Tube Steel (TS) and plate material, which had been previously received at WMI. Mr. Sy explained that WMI production personnel will be cutting and utilizing the material for the Travelers and Test Rack. Mr. Sy then provided the QA Inspector with Mill Test Reports (MTR's) and per the test reports, the material had been received from Steel Unlimited, Palomo's and Tubular Steel. After reviewing the MTR's, the material appeared to be in compliance with the contract requirements and is listed as follows:

1 Each 5" x 3" x .25" x 240" A500 Gr. B Ht. # Y05637 Rectangular Tube Steel
2 Each 6" x 4" x .312" x 240" A500 Gr. B Ht. # VO2592 Rectangular Tube Steel
1 Each 8" x 4" x .25" x 240" A500 Gr. B Ht. # A23027 Rectangular Tube Steel
1 Each 8" x 4" x .25" x 288" A500 Gr. B Ht. # M1257 Rectangular Tube Steel
1 Each 4" x 4" x .25" x 240" A500 Gr. B Ht. # A23465 Square Tube Steel
1 Each 4" x 4" x .25" x 240" A500 Gr. B Ht. # A23465 Square Tube Steel
23 Each .3125" x 24" x 240" A572 Gr. 50 Ht. # E3H097 Plate
2 Each .1875" x 8" x 74.75" A572 Gr. 50 Ht. # 500135 Plate
2 Each .1875" x 8" x 71.56" A572 Gr. 50 Ht. # 500135 Plate
2 Each .1875" x 8" x 120" A572 Gr. 50 Ht. # 500135 Plate

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Vance,Sean	Quality Assurance Inspector
Reviewed By:	Edmondson,Fred	QA Reviewer